WHAT IS CLAIMED IS:

1. A micro-lens substrate, comprising:

a first substrate having a plurality of first concaves formed on its surface;

a second substrate having a plurality of second concaves that is bonded to the first substrate via two kinds of resin layers; and

a micro-lens is formed by a double convex lens between the first substrate and the second substrate, at least one of the first substrate and the second substrate is transparent.

2. A micro-lens substrate, comprising:

a first substrate having a plurality of first concaves filled in a resin on a surface and a second substrate having a plurality of second concaves filled in the other resin on a surface bonded to each other via different kinds of resin so that said first concaves and said second concaves face each other,

wherein micro-lenses comprised of double convex lenses are formed between said first substrate and said second substrate, and at least one of the first substrate and the second substrate is transparent.